## **Hepatitis C**

An estimated 20,000 Maine people have been infected with hepatitis C virus (HCV). HCV is the most common bloodborne infection in the United States and the leading reason for liver transplantation among adults. Although the number of new infections per year has declined from an average of 240,000 in the 1980s to 19,000 in 2006, the burden of disease continues to grow. Because the infection is often asymptomatic and progresses slowly, most are unaware of their infection and are missing opportunities for therapeutic or preventive care.

Hepatitis C reports represent Maine people who tested positive for one or more hepatitis C virus diagnostic markers\*. In 2007, the Maine CDC received 1,453 reports of persons newly identified with markers for hepatitis C infection positivity, the vast majority of whom were chronically infected. Although the 1,453 reports made in 2007 represent an increase over the 1,192 reports received in 2006, the annual total is still consistent with the number of reports received over the previous five years.

Maine CDC does not have the resources to follow up on each hepatitis C report. In addition, because there is no test for acute hepatitis C infection, and because acute infection is usually asymptomatic, acute infections frequently go unrecognized. While there were only two reported cases of acute hepatitis C that met the federal CDC case definition in 2006 and one in 2007, it is likely that many more such infections occurred in Maine.

Of the 1,453 reported individuals in 2007, 37.5% were females and 62.4% were males. This was similar to data for 2006 where females represented 37 % of reports and males represented 63% of reports. Both years reflect gender breakdowns that are comparable with national statistics.

Using Maine 2006 and 2007 Census data, rates per 100,000 population were calculated for all of the Maine Districts using the 2006 and 2007 hepatitis C data. Cumberland District had the highest report rate for 2006 (152.3) and 2007 (153.6). In 2006, the Mid Coast District had the second highest rate (138.7) and Penquis District had the third highest report rate (122.3). In 2007, Penquis District had the second highest report rate (124.7) and Central District had the third highest report rate (119.4). All of the aforementioned Districts exceeded the rates for the State 2006 (90.2) and 2007 (110.3). Before drawing any conclusions from these data, it is important to consider the many factors that may contribute to differences among the Districts. These factors include: the location of hepatitis C testing sites and reporting laboratories, the location of reporting correctional facilities, the location of the Veterans Administration Hospital (which is a site for treatment of large numbers of patients), and health care providers' initiative to test and report positive results. In addition, the location of practices of liver specialists may also explain some of the differences. For persons for whom town of residence was unavailable, reporting facility town was used as a proxy.

To help identify cases of hepatitis C infection in Maine, medical providers are encouraged to consider each patient's risk for HCV infection to determine the need for testing. Patients for whom testing is indicated include: persons with past or present injection drug use; recipients of transfusions or organ transplants before July 1992; recipients of clotting factor concentrates produced before 1987; persons on chronic hemodialysis; persons with persistently abnormal alanine aminotransferase levels;

healthcare, emergency medical, and public safety workers after needle sticks, sharps or mucosal exposures to HCV-positive blood; and children born to HCV-positive women. Children should not be tested for anti-HCV before 18 months of age as anti-HCV from the mother might last until this age. If a diagnosis is desired prior to 18 months of age, testing for HCV RNA can be performed at 1-2 months of age. HCV RNA testing should be repeated at a subsequent visit regardless of the initial HCV RNA test result. Persons who test positive for HCV should be screened for susceptibility to hepatitis A and B virus infection and immunized appropriately.

\*A hepatitis C positive report was defined as the presence of any positive serologic marker for hepatitis C infection. These markers include anti-HCV (EIA), anti-HCV (RIBA), hepatitis C antigen (RT-PCR), or reports of HCV genotype. It should be noted that not all anti-HCV (EIA) reports were verified by supplemental assay. Also, neither EIA nor RIBA tests can distinguish between past and current infection. Reports were not cross-referenced with other state registries, but do represent unduplicated individuals reported for each year.

